

**CONTROLLED READING DEVICE**

This is a division of application Ser. No. 258,612, filed June 1, 1972, now U.S. Pat. No. 3,757,432.

**BACKGROUND OF THE INVENTION**

My U.S. Pat. No. 2,745,313 covers a "Controlled Reading Projector" for exhibiting reading material in progressive sequence in the direction of reading for increasing the ability of a person to read with greater speed and accuracy. The present invention embodies various improvements over the projector of that patent and the devices disclosed in other pertinent patents in this field. Such improvements are specified in more detail hereinafter.

**SUMMARY OF THE INVENTION**

It is an object of this invention to provide an improved controlled reading device and method wherein the terminal portion of a line being unveiled and occluded in segments in the direction of reading is occluded at a relatively more rapid rate and the initial portion of the succeeding line is unveiled at a relatively more rapid rate whereby transition from the end of one line to the beginning of the next line is more rapid and recognition of the beginning of the next line is facilitated.

It is a further object to provide a device in which the film strip is mounted on a semi-rigid stick slide which is fed through the projector by gravity to give a more rapid line to line indexing, a means by which this reading material can be pulled up manually in order to repeat segments of material, and a means whereby film material can be more easily handled and engaged with less film damage and wear.

It is a further object to provide a tachistoscopic feature which presents high speed exposures of words, symbols, pictures or other like material.

It is a further object to provide for processing training otherwise known as continuous tachistoscopic projection in which words of a story are projected, one word per line, at rates much higher than those usual for left to right reading.

It is a further object to provide a momentary control mechanism for the device to permit stopping the film at any line should a teacher wish to discuss the content.

It is a further object to provide a filmstrip stick slide for the device which permits two rows of lines of information to be positioned side-by-side with one row right side up and the other row upside down whereby reversal of the slide allows showing the second row of lines, thus providing a more condensed and compact film form.

**BRIEF DESCRIPTION OF THE DRAWING**

Other objects and advantages will become apparent from the following description which is to be taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a perspective view of the device of the present invention;

FIG. 2 is a side view partially in section;

FIG. 3 is a top view partially in section;

FIG. 4 is a front view partially in section;

FIG. 5 is an exploded perspective view of some of the main elements of the device;

FIG. 6 is a fragmentary view of the film strip and helix;

FIG. 7 is a view of the form of slot for the helix;

FIG. 8 is an enlarged view showing how the slot for the helix is cut in the helix tube; and

FIG. 9 is a front view of the plate sliding mask of the device.

**DESCRIPTION OF THE PREFERRED EMBODIMENTS**

Referring more particularly to the drawings, there is shown in FIG. 1 the device embodying the present invention. The projection system and all other elements of the device are mounted above base plate 10 and enclosed within a cover or casing 11 secured to the base. However, if a projection lamp of 12 volts is used, a transformer will be necessary, which transformer can be mounted underneath the base plate 10. If a 110 volt lamp is used no transformer will be required. For convenience and ease of removal of such cover to get at the various parts, it has been found advantageous to form the cover of at least two parts, but this can be varied as preferred.

Forming a part of the base plate 10 is an integral mounting bracket 12 into which is threaded a hand screw member 13. If a transformer is mounted under the base plate 10, the length of the bracket 12 can be extended to provide room above the screw member 13. Such bracket and screw member permit the device to be easily clamped onto all of the learning stations being provided today for learning laboratories, learning resource centers, communication laboratories, etc. This avoids the necessity of providing a special tablet or extension to accommodate the reader. A bolt can be substituted for the screw member so that the reader can be bolted to a booth to prevent easy removal. If free standing use is desired, this device can likewise be bolted to a tripod, metal plate or similar stand.

The projection system, shown in FIG. 2, includes a projection lamp 14, a condensing lens system 15, and a lens and tube 16 passing through the cover 11, all of which are in aligned relationship. The lamp 14, mounted in a socket 17 secured to a fixture 18, is connected to wires 19 whereby electric current can be supplied to the lamp. Above the lamp the casing 11 is provided with a ventilator 11a to permit the release of the heat which will be generated by the lamp.

Also mounted on the base plate 10 is an electric gear motor 20 which drives the helix shaft 21 through motor pulleys 22 and 22a, belts 23 and 23a and helix pulleys 24 and 24a (FIG. 5). The shaft of the motor has a slidable sleeve over it so that a key can be moved by means of knob 20a to engage a slot in either pulley 22 or 22a. In this manner the helix shaft can be driven at a 1:1 or 1:4 ratio. Such speed shifter is conventional and is not shown in detail. Secured to the shaft 21 are knob 25 with pin 25a for manual rotation of the shaft, cylindrical helix member 26 provided with a helical slot 27 extending diametrically across the cylindrical member, cam 28, and brake member 29 provided with a pin 30 which serves as a brake as hereinafter described. One end of the shaft 21 is mounted on a side of the device above the base plate with the shaft passing through the casing and the knob 25 accessible from the outside of the device. The brake member 29 at the other end of the shaft 21 passes through an L-shaped mounting block 31 secured to the internal cross-frame of the device with the pin 30 extending beyond the block so that it can rotate freely. A pivoted spring plate 32 is secured